



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,910	07/31/2001	Keun-Shik Nah	06192.0210.NPUS00	1154

7590 06/05/2003
McGuire Woods LLP
1750 Tysons Boulevard
Suite 1800
McLean, VA 22102

EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
----------	--------------

2672

DATE MAILED: 06/05/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,910

Applicant(s)

NAH ET AL.

Examiner

Javid A Amini

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5 and 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamura, and further in view of Kuzunuki.

1. Claim 1.

“A real size display system, comprising: a flat panel display unit for displaying image information and providing information on installed dot size; and an image converter that receives first image information, converts the first image information into second image information and output the second information to the flat panel display unit, wherein the first image information includes measurement information, and wherein the first image information is converted into the second image information based on the dot size information received from the flat panel display unit”, Yamamura teaches in paragraph 0008, that in order to corrects an image size from a source of image, and display in an image display unit, wherein a correction factor between the display size of the display source and display size of the image display unit is generated, and the above source of image is enlarged or reduced based on the correction factor. The step of the first image information includes measurement information is obvious because the first image can be provided by picture device or camera. This device can estimate the distance of an object. And also the step of converting first image information into second image information is obvious because by converting a first image information (an image from camera or etc.) , creating a

Art Unit: 2672

second image information (the actual size of an object). But Yamamura does not explicitly specify the flat panel display. However, Kuzunuki teaches in the claim 23 on page 17, an information processing apparatus provided with a flat panel display capable of displaying a document object.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kuzunuki into Yamamura in order to improve information processing system which establishes an environment in which the operator can interface with computers in a format similar to actual operation and actual objects can be used as man-machine interface parts.

2. Claim 3.

“The real size display system according to claims 1, wherein the flat panel display system includes a controller that enables magnification adjustment of the second image, thereby enabling real size display as desired by the user”, Yamamura teaches in paragraph 0008, that in order to corrects an image size from a source of image, and display in an image display unit, wherein a correction factor between the display size of the display source and display size of the image display unit is generated, and the above source of image is enlarged or reduced based on the correction factor. But Yamamura does not explicitly specify the flat panel display. However, Kuzunuki teaches in the claim 23 on page 17, an information processing apparatus provided with a flat panel display capable of displaying a document object.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kuzunuki into Yamamura in order to improve information processing system which establishes an environment in which the operator can interface with

Art Unit: 2672

computers in a format similar to actual operation and actual objects can be used as man-machine interface parts.

3. Claim 5.

“A real size display system, comprising: a photographing unit for photographing an image of a subject, and outputting first image information that includes measurement information of the subject; a flat panel display unit for displaying image information and providing information on installed dot size; and an image converter that receives first image information, converts the first image information into second image information and output the second information to the flat panel display unit, wherein the first image information includes measurement information, and wherein the first image information is converted into the second image information based on the dot size information received from the flat panel display unit”, Yamamura teaches in paragraph 0008, that in order to corrects an image size from a source of image, and display in an image display unit, wherein a correction factor between the display size of the display source and display size of the image display unit is generated, and the above source of image is enlarged or reduced based on the correction factor. The step of the first image information includes measurement information is obvious because the first image can be provided by picture device or camera. This device can estimate the distance of an object. And also the step of converting first image information into second image information is obvious because by converting a first image information (an image from camera or etc.) , creating a second image information (the actual size of an object). But Yamamura does not explicitly specify the flat panel display. However, Kuzunuki teaches in the claim 23 on page 17, an information processing apparatus provided with a flat panel display capable of displaying a document object. Thus, it would have been obvious to

Art Unit: 2672

one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kuzunuki into Yamamura in order to improve information processing system which establishes an environment in which the operator can interface with computers in a format similar to actual operation and actual objects can be used as man-machine interface parts.

4. Claim 7.

“The real size display system according to claims 5, wherein the flat panel display system includes a controller that enables magnification adjustment of the second image, thereby enabling real size display as desired by the user”, Yamamura teaches in paragraph 0008, that in order to corrects an image size from a source of image, and display in an image display unit, wherein a correction factor between the display size of the display source and display size of the image display unit is generated, and the above source of image is enlarged or reduced based on the correction factor. But Yamamura does not explicitly specify the flat panel display. However, Kuzunuki teaches in the claim 23 on page 17, an information processing apparatus provided with a flat panel display capable of displaying a document object.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kuzunuki into Yamamura in order to improve information processing system which establishes an environment in which the operator can interface with computers in a format similar to actual operation and actual objects can be used as man-machine interface parts.

5. Claims 2, 4, 6 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamura, and further in view of Itagaki.

6. Claim 2.

Art Unit: 2672

“The real size display system according to claims 1, wherein the first image information includes magnification, horizontal synchronization signal, vertical synchronization signal, clock and measured distance data”, Yamamura does not explicitly specify the image information. But Itagaki teaches in (col. 24, lines 57-66) that which is shown in FIG. 47, the synchronizing signal generating circuit 200 supplies dot clock signals, horizontal synchronizing signals--HSYNCA, HSYNCB and HSYNCC and vertical synchronizing signals--VSYNC to peripheral ICs in response to 12 times the chrominance sub carrier frequency. As a result, an image can be displayed in synchronization with an external image by the video encoder unit 112.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Itagaki into Yamamura in order to process data image while tens of images are displayed within a second, and processing must be performed in both horizontal (HSYNC) and vertical synchronizing (VSYNC) periods. Using Itagaki's method to present a high performance for processing a variety of image data together with a variety of sound data at high speed. And also in order to provide a computer by which multi-image synthesizing can be realized easily.

7. Claim 4.

“The real size display system according to claims 1, wherein the image converter extracts an R component, G component, and B component from the first image information, then converts the extracted R, G, B image signals based on dot size information provided from the display unit, and outputs the second image information to the flat panel display unit”, Yamamura does not explicitly specify the RGB components. However, Itagaki teaches in (col. 3, lines 18-27) the conventional game computer uses BG image data generally composed of only external block

Art Unit: 2672

sequential data, each block being indicated by 8-by-8 dots, the image is displayed by an RGB system.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Itagaki into Yamamura in order to process data image while tens of images are displayed within a second, and processing must be performed in both horizontal (HSYNC) and vertical synchronizing (VSYNC) periods. Using Itagaki's method to present a high performance for processing a variety of image data together with a variety of sound data at high speed. And also in order to provide a computer by which multi-image synthesizing can be realized easily.

8. Claim 6.

"The real size display system according to claims 5, wherein the first image information includes magnification, horizontal synchronization signal, vertical synchronization signal, clock and measured distance data", Yamamura does not explicitly specify the image information. But Itagaki teaches in (col. 24, lines 57-66) that which is shown in FIG. 47, the synchronizing signal generating circuit 200 supplies dot clock signals, horizontal synchronizing signals--HSYNCA, HSYNCB and HSYNCC and vertical synchronizing signals--VSYNC to peripheral ICs in response to 12 times the chrominance sub carrier frequency. As a result, an image can be displayed in synchronization with an external image by the video encoder unit 112.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Itagaki into Yamamura in order to process data image while tens of images are displayed within a second, and processing must be performed in both horizontal (HSYNC) and vertical synchronizing (VSYNC) periods. Using Itagaki's method to

Art Unit: 2672

present a high performance for processing a variety of image data together with a variety of sound data at high speed. And also in order to provide a computer by which multi-image synthesizing can be realized easily.

9. Claim 8.

“The real size display system according to claims 5, wherein the image converter extracts an R component, G component, and B component from the first image information, then converts the extracted R, G, B image signals based on dot size information provided from the display unit, and outputs the second image information to the flat panel display unit”, Yamamura does not explicitly specify the RGB components. However, Itagaki teaches in (col. 3, lines 18-27) the conventional game computer uses BG image data generally composed of only external block sequential data, each block being indicated by 8-by-8 dots, the image is displayed by an RGB system.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Itagaki into Yamamura in order to process data image while tens of images are displayed within a second, and processing must be performed in both horizontal (HSYNC) and vertical synchronizing (VSYNC) periods. Using Itagaki's method to present a high performance for processing a variety of image data together with a variety of sound data at high speed. And also in order to provide a computer by which multi-image synthesizing can be realized easily.

Art Unit: 2672

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8705 for regular communications and 703-746-8705 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid A Amini
Examiner
Art Unit 2672

Javid Amini
June 2, 2003



MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600